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AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Previously presented) A compound of the formula I:

I

wherein:

R¹ is selected from the group consisting of:

- (1) hydrogen,
- (2) C₁₋₆alkyl, which is unsubstituted or substituted with halogen, hydroxyl or phenyl,
- (3) -O-C₁₋₆alkyl, or
- (4) halogen;

R² is selected from the group consisting of:

- (1) C₁₋₆alkyl, which is unsubstituted or substituted with halogen, hydroxyl or phenyl,
- (2) C3.7cycloalkyl, which is unsubstituted or substituted with halogen, hydroxyl or phenyl,
- (3) phenyl, which is unsubstituted or substituted with one or more substituents independently selected from:
 - (a) -C₁-6alkyl, which is unsubstituted or substituted with
 - (i) halogen,
 - (ii) phenyl,
 - (iii) -NR10R11,
 - (b) -O-C₁₋₆alkyl, which is unsubstituted or substituted with 1-6 fluoro,
 - (c) halogen,
 - (d) hydroxy,
 - (e) -SCF₃,
 - (f) -SCHF₂,
 - (g) -SCH₃,

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(h) $-CO_2R^9$,

wherein R⁹ is independently selected from:

- (i) hydrogen,
- (ii) -C₁₋₆alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (iii) benzyl, and
- (iv) phenyl,
- (i) -CN,
- (j) $-NR^{10}R^{11}$,

wherein R¹⁰ and R¹¹ are independently selected from:

- (i) hydrogen,
- (ii) -C₁₋₆alkyl, which is unsubstituted or substituted with hydroxy, 1-6 fluoro or -NR¹²R¹³, where R¹² and R¹³ are independently selected from hydrogen and -C₁₋₆alkyl,
- (iii) -C5-6cycloalkyl,
- (iv) -pyrrolidinyl, which is unsubstituted or substituted with NR 10aR 11a,
- (v) benzyl, and
- (vi) phenyl,
- (k) -CONR¹⁰R¹¹, and
- (1) -NO₂, and
- (4) heterocycle, wherein heterocycle is selected from:

benzoimidazolyl, benzimidazolonyl, benzofuranyl, benzofurazanyl, benzopyrazolyl, benzotriazolyl, benzothiophenyl, benzoxazolyl, carbazolyl, carbolinyl, cinnolinyl, furanyl, imidazolyl, indolinyl, indolyl, indolazinyl, indazolyl, isobenzofuranyl, isoindolyl, isoquinolyl, isothiazolyl, isoxazolyl, naphthpyridinyl, oxadiazolyl, oxazolyl, oxazoline, isoxazoline, oxetanyl, pyranyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridopyridinyl, pyridazinyl, pyrimidyl, pyrimidyl, pyrrolyl, quinazolinyl, quinolyl, quinoxalinyl, tetrahydropyranyl, tetrazolyl, tetrazolopyridyl, thiadiazolyl, thiazolyl, thienyl, triazolyl, azetidinyl, 1,4-dioxanyl, hexahydroazepinyl, piperazinyl, piperidinyl, pyridin-2-onyl, pyrrolidinyl, morpholinyl, thiomorpholinyl, dihydrobenzoimidazolyl, dihydrobenzofuranyl, dihydrobenzothiophenyl, dihydrobenzoxazolyl, dihydrofuranyl, dihydroimidazolyl, dihydroimidazolyl, dihydroixoxazolyl, dihydropyrazinyl, dihydropyrazolyl, dihydropyridinyl, dihydrooxazolyl, dihydropyridinyl, dihydropyrimidinyl, dihydropyriolyl, dihydroquinolinyl, dihydrothiadiazolyl, dihydrothiazolyl, dihydrothianyl, dihydrothiadiazolyl, dihydrothiazolyl, dihydrothianyl, and

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tetrahydrothienyl, and N-oxides thereof, which is unsubstituted or substituted with one or more substituents independently selected from:

- (a) -C₁-6alkyl,
- (b) -O-C₁₋₆alkyl,
- (c) halogen,
- (d) hydroxy,
- (e) phenyl,
- (f) trifluoromethyl,
- (g) -OCF3,
- (h) -SCF₃,
- (i) -SCHF₂,
- (j) -SCH₃,
- (k) $-CO_2R^9$,
- (l) -NR¹⁰R¹¹, and
- (m) -CONR¹⁰R¹¹;

R³ is C₁₋₆alkyl, which is unsubstituted or substituted with halogen;

 R^4 and R^5 are independently selected from the group consisting of:

- (1) hydrogen, and
- (2) C₁₋₆alkyl,

or R⁴ and R⁵ may be joined together to form a cyclohexyl or cyclopentyl ring;

with the proviso that if R^1 , R^4 and R^5 are hydrogen and R^3 is unsubstituted $C_{1\text{-}6}$ alkyl, R^2 is other than 2-methoxy-phenyl;

and pharmaceutically acceptable salts thereof and individual diastereomers thereof.

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2. (Previously presented) The compound of Claim 1 of the formula Ia:

$$\begin{array}{c}
O \\
N \\
N \\
O = S = O \\
R^3
\end{array}$$

Ia

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

3. (Previously presented) The compound of Claim 2 of the formula Ic:

$$\begin{array}{c}
O \\
N \\
N \\
O = S = O
\end{array}$$
Ic

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

4. (Previously presented) The compound of Claim 1 of the formula Ib:

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

5. (Previously presented) The compound of Claim 4 of the formula Id:

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$$\begin{array}{c|c}
CH_3 & O \\
\hline
 & N \\
 & N \\
 & R^2
\end{array}$$

$$O = S = O$$

$$Id$$

and pharmaceutically acceptable salts thereof and individual enantiomers and diastereomers thereof.

- 6. (Previously presented) The compound of Claim 1 wherein R¹ is hydrogen.
- 7. (Previously presented) The compound of Claim 1 wherein \mathbb{R}^1 is fluoro.
- 8. (Previously presented) The compound of Claim 1 wherein R² is phenyl, which is unsubstituted or substituted with one or more substituents independently selected from:
 - (a) -C₁-6alkyl,
 - (b) halogen,
 - (c) hydroxy,
 - (d) trifluoromethyl,
 - (e) -OCF3,
 - (f) -OCHF₂,
 - (g) -SCF₃,
 - (h) -SCHF2, and
 - (i) -NH₂.
- 9. (Previously presented) The compound of Claim 8 wherein \mathbb{R}^2 is phenyl, which is unsubstituted or substituted with one or more substituents independently selected from:
 - (a) halogen,
 - (b) trifluoromethyl, and
 - (c) -OCF₃.
- 10. (Previously presented) The compound of Claim 9 wherein R² is phenyl, which is unsubstituted or substituted with halogen.
- 11. (Previously presented) The compound of Claim 1 whereinwherein R² is pyridyl, which is unsubstituted or substituted with one or more halogen.

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12. (Previously presented) The compound of Claim 1 wherein \mathbb{R}^3 is C_{1-6} alkyl.

13. (Previously presented) The compound of Claim 12 wherein R³ is -(CH₂)₂CH₃.

14. (Previously presented) The compound of Claim 1 wherein \mathbb{R}^4 is hydrogen and \mathbb{R}^5 is hydrogen.

15. (Previously presented) The compound of Claim 1 wherein R^4 is $C_{1\text{--}3}$ alkyl and R^5 is hydrogen.

16. (Previously presented) The compound of Claim 15 wherein \mathbb{R}^4 is -CH3 and \mathbb{R}^5 is hydrogen.

17. (Previously presented) A compound which is selected from the group consisting of:

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and pharmaceutically acceptable salts thereof.

Claims 18-26 (Canceled)

- 27. (New) A pharmaceutical composition which comprises an inert carrier and the compound of Claim 1 or a pharmaceutically acceptable salt thereof.
- 28. (New) A method for inhibiting the glycine transporter GlyT1 in a mammal in need thereof which comprises the administration of an effective amount of the compound of Claim 1 or a pharmaceutically acceptable salt thereof.

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29. (New) A method for treating a neurological and psychiatric disorders associated with glycinergic or glutamatergic neurotransmission dysfunction in a mammalian patient in need thereof which comprises administering to the patient a therapeutically effective amount of the compound of Claim 1 or a pharmaceutically acceptable salt thereof.

30. (New) A method for treating schizophrenia in a human patient in need thereof which comprises administering to the patient a therapeutically effective amount of the compound of Claim 1 or a pharmaceutically acceptable salt thereof.